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## ABSTRACT

A compact, portable and NIST traceable pressure source dynamically generates very low pressures includes at least one adjustable valves in-line with a fluid, such as air, flowing through the valve. A differential pressure is created across a pressure control device downstream from the valve. The differential pressure varies depending on the volume of the gas flow and the amount of resistance to the gas flow. The pressure generating device utilizes a miniature pump to create a pressure, or, alternatively, a vacuum, that causes gas flow. The pressure generating device is compact and capable of providing a very low and stable differential pressure by using a dynamic flow that compensates for temperature changes and volume changes. The compact module may be configured as a plug-in module for existing handheld calibrators for operator ease of use.